

In the Claims

1 1. A method for reducing oxalate concentrations in an animal wherein said method
2 comprises administering a composition comprising a material selected from the group
3 consisting of oxalate-degrading microbes and oxalate-degrading enzymes.

1 2. The method, according to claim 1, wherein said method comprises administration
2 of oxalate-degrading enzymes.

1 3. The method, according to claim 2, wherein said oxalate-degrading enzymes are
2 derived from bacteria.

1 4. The method, according to claim 3, wherein said oxalate-degrading enzymes are
2 derived from bacteria of the group consisting of *Clostridium*, *Pseudomonas*, and oxalobacter.

1 5. The method, according to claim 2, wherein said enzymes are produced
2 recombinantly.

1 6. The method, according to claim 5, wherein said enzymes are produced
2 recombinantly in *Escherichia coli*.

1 7. The method, according to claim 2, which comprises administering formyl-CoA
2 transferase and oxalyl-CoA decarboxylase.

1 8. The method, according to claim 7, wherein said enzymes are produced
2 recombinantly.

1 9. The method, according to claim 2, wherein said oxalate-degrading enzymes are
2 expressed in plants which have been transformed with polynucleotides encoding said
3 oxalate-degrading enzymes.

1 10. The method, according to claim 1, wherein said method comprises administration
2 of oxalate-degrading microbes.

1 11. The method, according to claim 10, wherein said oxalate-degrading microbes
2 have been transformed with polynucleotides which encode said oxalate-degrading enzymes.

1 12. The method, according to claim 2, which further comprises administering an
2 additional factor selected from the group consisting of oxalyl CoA, MgCl₂ and TPP.

1 13. The method, according to claim 10, which comprises administering whole viable
2 oxalate-degrading microbes.

1 14. The method, according to claim 13, wherein said microbes are *Oxalobacter*
2 *formigenes*.

1 15. The method, according to claim 13, wherein said microbes are selected from the
2 group consisting of *Clostridium* and *Pseudomonas*.

1 16. The method, according to claim 13, wherein said microbes colonize the
2 intestines.

1 17. The method, according to claim 1, which is used to treat a patient whose
2 intestines have insufficient numbers of oxalate-degrading bacteria.

1 18. The method, according to claim 17, which is used to treat a patient whose natural
2 intestinal bacteria have been depleted due to treatment with antibiotics.

1 19. The method, according to claim 1, which is used to treat a domesticated animal,
2 said animal having deficient numbers of oxalate-degrading bacteria.

1 20. The method, according to claim 19, wherein said domesticated animal is selected
2 from the group consisting of dogs, cats, rabbits, ferrets, guinea pigs, hamsters and gerbils.

1 21. The method, according to claim 19, wherein said domesticated animal is an
2 agricultural animal.

1 22. The method, according to claim 21, wherein said agricultural animal is selected
2 from the group consisting of horses, cows and pigs.

1 23. The method, according to claim 19, which is used treat a domesticated animal,
2 said animal's natural intestinal bacteria having been depleted due to treatment with
3 antibiotics.

1 24. The method, according to claim 1, wherein said microbe or said enzyme is
2 formulated to reduce inactivation in the stomach.

1 25. The method, according to claim 24, wherein said formulation comprises a
2 coating which dissolves preferentially in the small intestine compared to the stomach.

1 26. A composition for reducing oxalate levels in an animal wherein said composition
2 comprises a material selected from the group consisting of oxalate-degrading microbes and
3 oxalate-degrading enzymes.

1 27. The composition, according to claim 26, wherein said composition comprises
2 whole, viable oxalate-degrading bacteria.

1 28. The composition, according to claim 26, wherein said composition comprises
2 cell lysate of oxalate-degrading bacteria.

1 29. The composition, according to claim 26, wherein said bacteria are *Oxalobacter*
2 *formigenes*.

1 30. The composition, according to claim 26, wherein said bacteria are selected from
2 the group consisting of *Clostridium* and *Pseudomonas*.

1 31. The composition, according to claim 26, wherein said composition comprises
2 oxalate-degrading enzymes.

1 32. The composition, according to claim 31, wherein said enzymes are formyl-CoA
2 transferase and oxalyl CoA decarboxylase.

1 33. The composition, according to claim 32, which further comprises a compound
2 selected from the group consisting of oxalyl CoA, $MgCl_2$, and TPP.

1 34. The composition, according to claim 26, wherein said composition is formulated
2 to reduce deactivation in the stomach.

1 35. The composition, according to claim 34, wherein said composition is coated with
2 a material which preferentially degrades in the small intestine.